Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Defense Information Systems Agency

R-1 Program Element (Number/Name)

Date: February 2018

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 7:

PE 1203610K / Teleport Program

Operational Systems Development

Appropriation/Budget Activity

COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	0.000	0.000	0.642	2.323	-	2.323	2.308	2.391	2.424	2.437	Continuing	Continuing
NS01: Teleport Generation 1/2	0.000	0.000	0.642	2.323	-	2.323	2.308	2.391	2.424	2.437	Continuing	Continuing

#### A. Mission Description and Budget Item Justification

Department of Defense (DoD) Teleport system is a satellite communications (SATCOM) gateway that links the deployed warfighter to the Global Information Grid. The DoD Teleport program has fielded system capabilities incrementally using a multi-generational approach with Generation 1 and 2 Full Deployment authorized by DoD Chief Information Officer on February 18, 2011. DoD Teleport Generation 3 consists of three phases; Phases 1 and 2 are in Production and Deployment while Phase 3 is in Engineering and Manufacturing Development. Each DoD Teleport investment increases the warfighter's ability to communicate with a world-wide, net-centric set of information capabilities, which is vital for the DoD to maintain a persistent presence among its adversaries.

Currently, the Teleport system operates as an upgrade of SATCOM capabilities at selected DoD SATCOM gateways. This system provides deployed warfighters with seamless worldwide multi-band SATCOM connectivity to the Defense Information System Network (DISN) Service Delivery Nodes and legacy tactical command, control, communications, computers, and intelligence systems. It also provides centralized integration capabilities, contingency capacity, and common interfaces to access the DISN.

DoD Teleport's goal is to provide secure, seamless, interoperable, and economical upgrades to DoD SATCOM Gateways and meet the growing throughput requirements of the deployed warfighter.

The primary beneficiaries of the DoD Teleport investment are the DoD Combatant Commanders, Military Departments, Defense Agencies, and the warfighter. DoD Teleport Generation 3 is designed to meet the growing demands of the warfighter through the execution of the following phases:

Phase 1: Gateway Advanced Extremely High Frequency [Extended Data Rate] terminals provides tactical users with a 350% bandwidth increase in survivable, antijam communications through all peacetime and combat operations by installing Navy Multiband Terminals (NMT) at select Teleport sites. In addition to enhanced throughput, the NMT maintains compatibility with legacy waveforms and current tactical terminals.

Phase 2: Gateway Wideband Global SATCOM X/Ka-band terminals provide enhanced Wideband Global System (WGS) X/Ka capability to warfighters worldwide by installing terminals from the Modernization of Enterprise Terminal (MET) program at DoD Teleport and other gateway sites. This gateway enhancement allows Teleport to replace end-of-life Defense Satellite Communications System (DSCS) terminals while remaining interoperable with tactical WGS X/Ka-band users. The MET enhancement provides a 300% Ka-band capacity increase and an 1100% X-band capacity increase to current enterprise terminal X/Ka capabilities. Additionally, it enables the DoD Teleport system to maintain operational availability consistent with Generation 2 requirements and reduce the overall life-cycle cost of X/Ka capabilities across the DoD.

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Date: February 2018

Appropriation/Budget Activity

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PE 1203610K / Teleport Program

Operational Systems Development

Phase 3: Mobile User Objective System (MUOS) to Legacy Ultra High Frequency (UHF) systems interoperability will provide interoperability between MUOS users and legacy UHF users by installing MUOS-to-Legacy UHF SATCOM Gateway Component (MLGC) suites of equipment at DoD Teleport sites. MUOS is the next generation DoD UHF SATCOM system that will provide the warfighter with modern worldwide mobile communication services, utilizing the Wideband Code Division Multiple Access waveform for use in the military UHF SATCOM band. MLGC suites will provide critical continuity and interoperability as DoD tactical satellite users transition from legacy waveforms and radios to the Joint Tactical Radio System.

B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	0.000	0.642	2.334	-	2.334
Current President's Budget	0.000	0.642	2.323	-	2.323
Total Adjustments	0.000	0.000	-0.011	-	-0.011
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustments	-	-	-0.011	-	-0.011

### **Change Summary Explanation**

The decrease of \$-0.011 in FY 2019 is attributed to reduced requirements for engineering support during system testing and changes to software.

Exhibit R-2A, RDT&E Project Ju	stification	: PB 2019 C	efense Info	rmation Sy	stems Ager	псу			Date: February 2018					
Appropriation/Budget Activity 0400 / 7					_		t (Number/ ort Program		Number/Name) eleport Generation 1/2					
COST (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost			
NS01: Teleport Generation 1/2	0.000	0.000	0.642	2.323	-	2.323	2.308	2.391	2.424	2.437	Continuing	Continuing		
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-				

### A. Mission Description and Budget Item Justification

The Teleport program will implement an integrated test approach that will combine the objectives from multiple testing disciplines (e.g., developmental test, operational test, interoperability, and information assurance) throughout the testing lifecycle to support needed system evaluations. The Teleport program executes its own test events to achieve this integrated approach, but will partner with each phase's respective program office generated test activities to leverage the data needed to satisfy Teleport program test objectives. An approach summary for Teleport Gen 1/2 follows:

Generation 1/2 Technology Refresh/Technology Insertion: Funding will be used to maintain the Joint Interoperability Certification of the DoD Teleport System as the system is upgraded and refreshed with new components.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: Teleport Program	0.000	0.642	2.323	-	2.323
Description: N/A					
FY 2018 Plans: Funding will be used to support the Joint Interoperability Certification of the DoD Teleport System.  The increase of +\$0.642 from FY 2017 to FY 2018 is attributed to the funding be moved from program element 0303610K for Teleport.					
FY 2019 Base Plans: Funding will be used to maintain the Joint Interoperability Certification of the DoD Teleport System as the system is upgraded with new components.					
FY 2018 to FY 2019 Increase/Decrease Statement: The increase +\$1.681 from FY 2018 to FY 2019 is attributed to an increase in the level of effort to plan and test upgrades to the DoD Teleport System's aging and end-of-life components.					
Accomplishments/Planned Programs Subtotals	0.000	0.642	2.323	-	2.323

Exhibit R-2A, RDT&E Project Justi	ification: PB	2019 Defens	se Information	n Systems /	Agency				Date: Fel	oruary 2018	
Appropriation/Budget Activity 0400 / 7					•	nent (Numb leport Progra	•	, ,	Number/Na eleport Gen	,	
C. Other Program Funding Summa	ary (\$ in Milli	ons)		'				'			
		•	FY 2019	FY 2019	FY 2019					Cost To	
<u>Line Item</u>	FY 2017	FY 2018	Base	ОСО	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	<b>Total Cost</b>
• O&M, DW/	0.000	27.647	21.299	10.300	31.599	23.585	24.456	24.777	24.046	Continuing	Continuing
PE0303610K: O&M, DW										_	
<ul> <li>Procurement, DW/</li> </ul>	0.000	46.638	34.071	3.800	37.871	24.242	25.550	25.858	26.675	Continuing	Continuing
PE0303610K: Procurement, DW										•	
<u>Remarks</u>											

# D. Acquisition Strategy

The Teleport Program Office (TPO) uses the DoD preferred evolutionary acquisition approach to acquire Commercial off the Shelf (COTS) and modified COTS equipment when possible. The three TPO procuring agencies, Program Manager Defense Communications and Army Transmission Systems, the Space and Naval Warfare Systems Command, and Defense Information Technology Contracting Organization (DITCO) provide direct contracting support. Assistance from other Departments including Army, Navy, and Air Force is acquired via Military Interdepartmental Purchase Request for both organic and contracted support. The TPO maximizes the use of performance-based contracts and requires contractors to establish and manage specific earned value data to mitigate risk and monitor deviations from cost, schedule, and performance objectives. Performance is evaluated thorough post-award contract reviews, performance assessment during quarterly program reviews. The MLGC program will use various contract types to employ the vendor best suited to deliver the program's capabilities to the warfighter.

#### **E. Performance Metrics**

Teleport Cost and Schedule Performance Metrics:

Teleport manages and tracks its cost and schedule performance parameters using a tailored Earned Value Management System (EVMS) process, integrating the program plan, the program schedule, Work Breakdown Structure (WBS), and financial data. Progress is monitored/documented monthly showing percentages complete for schedule and cost. Formal updates with changes to the schedule are documented against the program baseline.

**Teleport Program Metrics:** 

RDT&E funds will be used to maintain an interoperability certification of the fielded DoD Teleport system in light of required/desired system changes. These changes are certified in standalone test events or as part of DoD Interoperability Communications Exercises (DICE). Percentage will be computed by dividing the number of changes under test by the number deemed DoD Interoperable.

Performance metrics have been established in four measurement areas: 1) customer results, 2) mission and business results, 3) processes and activities, and 4) technology. Specific measurement indicators and units of measure vary by measurement area, and metrics in each of the aforementioned areas are measured annually. Teleport will use the same measurement areas for performance metrics in FY 2016, FY 2017 and FY 2018.

Generation 1/2 Metric:

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Exhibit R-2A, RDT&E Project Justification: PB 2019 De	efense Information Systems Agency	Date: February 2018
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1203610K / Teleport Program	Project (Number/Name) NS01 / Teleport Generation 1/2
Percentage of system changes resulting in interoperability	y certification	
FY 2017 Actual: 100%		
FY 2018 Target: 100% FY 2019 Target: 100%		
•		

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Defense Information Systems Agency

Date: February 2018

Appropriation/Budget Activity R-1 Program Element (Number/Name) Project (Number/Name)

0400 / 7 PE 1203610K / Teleport Program NS01 / Teleport Generation 1/2

Product Developme	nt (\$ in M	illions)		FY	2017	FY	2018		2019 ase		2019 CO	FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering Technical & Design Services (GDS)	Various	SSC Atlantic : Various	0.000	-		-		-		-		-	0.000	0.000	0.000
Engineering Technical & Design Services (MLGC)	Various	Various Locations : Various	0.000	-		-		-		-		-	0.000	0.000	0.000
Engineering Services	C/CPFF	STF Ltd. : Fredericksburg, VA	0.000	-		-		-		-		-	0.000	0.000	0.000
Engineering Services	IA	SPAWAR Atlantic : Charleston, SC	0.000	-		-		-		-		-	0.000	0.000	0.000
Engineering Technical & Design Services (MVG)	IA	SSC Atlantic:Various : Various	0.000	-		-		-		-		-	0.000	0.000	0.000
Engineering Technical & Design Services (Digital IF)	IA	CERDEC : TBD	0.000	-		-		-		-		-	0.000	0.000	0.000
		Subtotal	0.000	-		-		-		-		-	0.000	0.000	N/A
Support (\$ in Million	ıs)			FY 2	2017	FY	2018		2019 ase		2019 CO	FY 2019 Total			
·	Contract														Towast

Support (\$ in Million	s)			FY 2	2017	FY	2018		2019 ase		2019 CO	FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Program Office Support	C/FFP	BAH : McLean, VA	0.000	-		-		-		-		-	0.000	0.000	0.000
Program Office Support	SS/CPFF	SAIC : Falls Church, VA	0.000	-		-		-		-		-	Continuing	Continuing	Continuing
Program Office Support	C/CPAF	STF : Fredericksburg, VA	0.000	-		-		-		-		-	0.000	0.000	0.000
Program Office Support	IA	SPAWAR : Charleston, SC	0.000	-		-		-		-		-	0.000	0.000	0.000
Contractor Program Office Support	MIPR	SSC Atlantic, STF : Charleston, SC	0.000	-		-		-		-		-	0.000	0.000	0.000
Program Office Support	IA	CERDEC : Various	0.000	-		-		-		-		-	0.000	0.000	0.000
Engineering Technical & Design Services	IA	PM DCATS : Ft. Belvoir, VA	0.000	-		-		-		-		-	0.000	0.000	0.000
	IA		0.000	-		-		-		-		-	0.000	0.000	

Exhibit R-3, RDT&E F	Project C	ost Analysis: PB 2	2019 Defe	nse Infor	mation S	ystems A	gency					Date:	February	2018	
Appropriation/Budge 0400 / 7	t Activity	,					<b>ogram Ele</b> 3610K <i>l 7</i>		lumber/N Program	ame)		(Numbe Teleport (		n 1/2	
Support (\$ in Millions	s)			FY 2	2017	FY 2	2018		2019 ase		2019 CO	FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Engineering Technical Support (Tech Refresh)	MIPR	CERDEC : APG	0.000	-		0.642	Oct 2017	2.323	Oct 2018	-		2.323	Continuing	Continuing	Continuing
Engineering Technical Support (Tech Refresh) 2	IA	PM DCATS : Ft. Belvoir, VA	0.000	-		-		-		-		-	0.000	0.000	0.000
Program Office Support	WR	PLD : TBD	0.000	-		-		-		-		-	0.000	0.000	0.000
Program Office Support Engineering	IA	JITC : Ft. HUA, AZ	0.000	-		-		-		-		-	0.000	0.000	0.000
Engineering Technical Support (Spectral Warrior)	IA	NRL : NRL	0.000	-		-		-		-		-	0.000	0.000	0.000
Engineering Technical Support (NSSEG)	Various	SSC Atlantic : Various	0.000	-		-		-		-		-	0.000	0.000	0.000
		Subtotal	0.000	-		0.642		2.323		-		2.323	Continuing	Continuing	N/A
Test and Evaluation	(\$ in Milli	ons)		FY 2	2017	FY 2	2018		2019 ase		2019 CO	FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Testing Support Services (Tech Refesh)	MIPR	JITC : Ft. Huachuca	0.000	-		-		-		-		-	0.000	0.000	0.000
		Subtotal	0.000	-		-		-		-		-	0.000	0.000	N/A
			Prior Years	FY 2	2017	FY 2	2018	Ва	2019 ase		2019 CO	FY 2019 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	0.000	-		0.642		2.323		-		2.323	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2019 D	)efe	nse	Infor	mati	ion :	Syste	ems /	Age	ncy	,												Date	e: Fe	ebru	ary	201	8	
Appropriation/Budget Activity 0400 / 7										_			•	Nun Prog			ne)			•	(Nu Tele				,	1/2		
		FY	2017	7		FY 2	2018			FY	2019	•		FY 2	2020			FY 2	2021			FY 2	2022	<u> </u>		FY	2023	3
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Teleport Program					,	,																						,
Integrated testing that supported Teleport system evaluation and Technology Refresh/ Technology Insertion																												

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Defense Information System	ns Agency		Date: February 2018
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
0400 / 7	PE 1203610K / Teleport Program	NS01 / Tel	eport Generation 1/2

# Schedule Details

	St	art	Eı	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Teleport Program				
Integrated testing that supported Teleport system evaluation and Technology Refresh/ Technology Insertion	1	2017	4	2023